ASR+Translation

Team : ntu_r06942112_final
Team members :

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Used package
Sklearn : from sklearn.model_selection import
train_test_split SampleSubmission.csv
jieba : import jieba
       jieba.set_dictionary('dict.txt.big')

gensim_Word2Vec : from gensim.models import Word2Vec

##compile
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bash final.sh train.data train.caption test.data test.csv
```

Model:
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Retrieval_based + attention
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diagram
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 (1) pad zero to the post of training/testing data
 (2) siamese network : Mfcc -> no embedding layers
                       Caption -> pad_sequences ->
embedding_layers
 (3) attention mechanism : dot(Mfcc, word vector of
caption)
 (4) cosine similarity : dot(Mfcc,attention
mechanism[flatten])
 (5) hinge loss margin : 0.2
 (6) simultaneously train contrastive and prediction
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model
```
## keep in mind in the future

 (1) regularizer term : dropout / l2 / l2
 (2) output is a score : dummy variable , two models(prediction/contrastive) train simultaneously
 (3)Word2Vec in Chinese may not get the good word vector.when training our model, embedding layer’s trainable -> True
```